

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	1	of	8	Attorney Docket Number	015389-002611US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	1	US 2004-0242529 A1	12-02-2004	Cech et al.	
	2	US 2004-0247613 A1	12-09-2004	Cech et al.	
	3	US 2005-0013825 A1	01-20-2005	Cech et al.	
	4	US 4,554,101	11-19-1985	Hopp	
	5	US 5,001,225	03-19-1991	Taylor	
	6	US 5,075,227	12-24-1991	Hagen	
	7	US 5,639,613	06-17-1997	Shay et al.	
	8	US 5,853,719	12-29-1998	Nair et al.	
	9	US 5,919,656	07-06-1999	Harrington et al.	
	10	US 6,306,388 B1	10-23-2001	Nair et al.	
	11	US 6,387,701 B1	05-14-2002	Nair et al.	
	12	US 6,545,133 B1	04-08-2003	Weinrich et al.	
	13	US 6,787,133 B2	09-07-2004	Weinrich et al.	
	14	US 7,262,174 B2	08-28-2007	Jiang et al.	
	15	US 7,262,288 B1	08-28-2007	Cech et al.	
	16	US 7,285,639 B2	10-23-2007	Cech et al.	
	17	US 60/038,750		Counter et al.	
	18	US 09/432,503		Cech et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	19	CA	2,194,393	A1	01-25-1996	Geron Corporation		<input type="checkbox"/>
	20	EP	0 799 315	A2	10-08-1997	Cold Spring Harbor Lab.		<input type="checkbox"/>
	21	EP	1 093 381	B1	08-20-2003	GemVax AS		<input type="checkbox"/>
	22	WO	82/01461	A1	05-13-1982	Stanford University		<input type="checkbox"/>
	23	WO	97/38013	A1	10-16-1997	Geron Corporation		<input type="checkbox"/>
	24	WO	99/63945	A2	12-16-1999	Sloan-Kettering Institute		<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	2	of	8	Attorney Docket Number	015389-002611US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	25	WO	00/02581	A1	01-20-2000	Norsk Hydro AS		<input type="checkbox"/>
	26	WO	00/61766	A2	10-19-2000	Biomira, Inc.		<input type="checkbox"/>
	27	WO	00/73420	A2	12-07-2000	Whitehead Inst. et al.		<input type="checkbox"/>
	28	WO	01/60391	A1	08-23-2001	Regents of the Univ. of California		<input type="checkbox"/>
	29	WO	02/094213	A2	11-28-2002	Dow Corning Toray Silicone Co., Ltd.		<input type="checkbox"/>
	30	WO	03/038047	A2	05-08-2003	Baylor College of Medicine		<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	31	Adaptive definition, www.answers.com/topic/adaptive, 1 page (2007).	<input type="checkbox"/>
	32	ALBERTS, B. et al., <u>Molecular Biology of the Cell</u> , Newton Press Ltd., p. 326, Fig. 7-43 (July 20, 1995).	<input type="checkbox"/>
	33	ANDERSON, W., "Human gene therapy," <i>Nature</i> 392:25-30 (1998).	<input type="checkbox"/>
	34	AYYOUB, M. et al., "Lack of tumor recognition by hTERT peptide 540-548-specific CD8 ⁺ T cells from melanoma patients reveals inefficient antigen processing," <i>Eur. J. Immunol.</i> 31:2642-51 (2001).	<input type="checkbox"/>
	35	BEASLEY, E. et al., "Statistical refinement of primer design parameters," <u>PCR Applications</u> , Innis et al., Eds., Academic Press, San Diego, pp. 55-71 (1999).	<input type="checkbox"/>

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	3	of	8	Attorney Docket Number	015389-002611US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	36	BELLONE, M. et al., "In vitro priming of cytotoxic T lymphocytes against poorly immunogenic epitopes by engineered antigen-presenting cells," <i>Eur. J. Immunol.</i> 24:2691-8 (1994).	<input type="checkbox"/>	
	37	BELLONE, M. et al., "Rejection of a nonimmunogenic melanoma by vaccination with natural melanoma peptides on engineered antigen-presenting cells," <i>J. Immunol.</i> 158:783-9 (1997).	<input type="checkbox"/>	
	38	BENEDICT, C. et al., "The long isoform of terminal deoxynucleotidyl transferase enters the nucleus and, rather than catalyzing nontemplated nucleotide addition, modulates the catalytic activity of the short isoform," <i>J. Exp. Med.</i> 193(1):89-99 (2001).	<input type="checkbox"/>	
	39	BOCZKOWSKI, D. et al., "Dendritic cells pulsed with RNA are potent antigen-presenting cells in vitro and in vivo," <i>J. Exp. Med.</i> 184:465-72 (1996).	<input type="checkbox"/>	
	40	BOWIE, J. et al., "Deciphering the message in protein sequences: tolerance to amino acid substitutions," <i>Science</i> 257:1306-10 (1990).	<input type="checkbox"/>	
	41	BURGESS, W. et al. "Possible dissociation of the heparin-binding and mitogenic activities of heparin-binding (acidic fibroblast) growth factor-1 from its receptor-binding activities by site-directed mutagenesis of a single lysine residue," <i>J. Cell Biol.</i> 111(5 Pt 1):2129-38 (1990).	<input type="checkbox"/>	
	42	FLOWER, D. "Towards in silico prediction of immunogenic epitopes," <i>Trends Immunol.</i> 24(12):667-74 (2003).	<input type="checkbox"/>	
	43	FROLKIS, M. et al., "Dendritic cells reconstituted with human telomerase gene induce potent cytotoxic T-cell response against different types of tumors," <i>Cancer Gene Ther.</i> 10:239-49 (2003).	<input type="checkbox"/>	
	44	GRAY, J. et al., "Cloning and expression of genes for the Oxytricha telomere-binding protein specific subunit interactions in the telomeric complex," <i>Cell</i> 67:807-14 (1991).	<input type="checkbox"/>	
	45	GREENBERG, R. et al., "Expression of mouse telomerase reverse transcriptase during development, differentiation, and proliferation," <i>Oncogene</i> 16:1723-30 (1998).	<input type="checkbox"/>	
Examiner Signature				Date Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	4	of	8	Attorney Docket Number	015389-002611US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	46	GREENER, M., "Telomerase: The search for a universal cancer vaccine," <i>Mol. Med. Today</i> 6:257 (2000).	<input type="checkbox"/>
	47	GREENSPAN, N. & Di CERA, E., "Defining epitopes: It's not as easy as it seems," <i>Nature Biotech.</i> 7:936-7 (1999).	<input type="checkbox"/>
	48	GREIDER, C., "Telomerase and senescence: The history, experiment, the future," <i>Curr. Biol.</i> 8(5):R178-81 (1998).	<input type="checkbox"/>
	49	GURA, T., "Antisense has growing pains," <i>Science</i> 270:575-7 (1995).	<input type="checkbox"/>
	50	HARRINGTON, L. et al., "Gel shift and UV cross-linking analysis of <i>Tetrahymena</i> telomerase," <i>J. Biol. Chem.</i> 270(15):8893-901 (1995).	<input type="checkbox"/>
	51	HEISER, A. et al., "Human dendritic cells transfected with renal tumor RNA stimulate polyclonal T-cell responses against antigens expressed by primary and metastatic tumors," <i>Cancer Res.</i> 61:3388-93 (2001).	<input type="checkbox"/>
	52	HEISER, A. et al., "Induction of polyclonal prostate cancer-specific CTL using dendritic cells transfected with amplified tumor RNA," <i>J. Immunol.</i> 166:2953-60 (2001).	<input type="checkbox"/>
	53	HERBERT, J. et al., <i>The Dictionary of Immunology</i> , 3 rd Edition, Academic Press, London, pp. 58-59 (1985).	<input type="checkbox"/>
	54	HERNÁNDEZ, J. et al., "Identification of a human telomerase reverse transcriptase peptide of low affinity for HLA A2.1 that induces cytotoxic T lymphocytes and mediates lysis of tumor cells," <i>Proc. Natl. Acad. Sci. USA</i> 99(19):12275-80 (2002).	<input type="checkbox"/>
	55	HIRASHIMA, M. "Ecalectin/galectin-9, a novel eosinophil chemoattractant: Its function and production," <i>Int. Arch. Allergy Immunol.</i> 122(Suppl. 1):6-9 (2000).	<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	5	of	8	Attorney Docket Number	015389-002611US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	56	HOLMES, E., "PSMA specific antibodies and their diagnostic and therapeutic use," <i>Exp. Opin. Invest. Drugs</i> 10(3):511-9 (2001).	<input type="checkbox"/>
	57	HUSTON, J. et al., "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in <i>Escherichia coli</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 85:5879-83 (1988).	<input type="checkbox"/>
	58	JIANG, D. et al., "Smooth muscle tissues express a major dominant negative splice variant of the type 3 Ca ²⁺ release channel (ryanodine receptor)," <i>J. Biol. Chem.</i> 278(7):4763-9 (2003).	<input type="checkbox"/>
	59	JOHNSTONE, A. & THORPE, R., <i>Immunocytochemistry in Practice</i> , 2 nd Ed., Blackwell Scientific Publications, Oxford, pp. 30, 49-50 (1987).	
	60	KIYONO et al., "Both Rb/p16 ^{INK4a} inactivation and telomerase activity are required to immortalize human epithelial cells," <i>Nature</i> 396: 84-88 (Nov. 1998).	<input type="checkbox"/>
	61	KRAMS, M. et al., "Regulation of telomerase activity by alternate splicing of human telomerase reverse transcriptase mRNA in a subset of neuroblastomas," <i>Am. J. Pathol.</i> 159(5):1925-32 (2001).	<input type="checkbox"/>
	62	LANFRANCHI, G. et al., "Identification of 4370 expressed sequence tags from a 3'-end-specific cDNA library of human skeletal muscle by DNA sequencing and filter hybridization," <i>Genome Res.</i> 6:35-42 (1996).	<input type="checkbox"/>
	63	LANGFORD, L. et al., "Telomerase activity in ordinary meningiomas predicts poor outcome," <i>Hum. Pathol.</i> 28(4):416-20 (1997).	
	64	LAZAR, E. et al., "Transforming growth factor alpha: mutation of aspartic acid 47 and leucine 48 results in different biological activities," <i>Mol. Cell. Biol.</i> 8:1247-52 (1988).	<input type="checkbox"/>
	65	MALICKI, J. et al., "A human <i>HOX4B</i> regulatory element provides head-specific expression in <i>Drosophila</i> embryos," <i>Nature</i> 358:345-57 (July 23, 1992).	<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	6	of	8	Attorney Docket Number	015389-002611US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	66	MARTIN-RIVERA, L. et al., "Expression of mouse telomerase catalytic subunit in embryos and adult tissues," <i>Proc. Natl. Acad. Sci. USA</i> 95:10471-6 (September 1998).	<input type="checkbox"/>
	67	Microbix Biosystems, Inc., AdMax™ adenovirus vector creation kits, 3 pages. http://www.microbix.com/products/PDFs/AdMaxVectorCreationKits.pdf	<input type="checkbox"/>
	68	MINEV, B. et al., "Cytotoxic T cell immunity against telomerase reverse transcriptase in humans," <i>Proc. Natl. Acad. Sci. USA</i> 97(9):4796-801 (2000).	<input type="checkbox"/>
	69	MORIN, G., "The implications of telomerase biochemistry for human disease," <i>Eur. J. Cancer</i> 33(5):750-60 (1997).	<input type="checkbox"/>
	70	NAIR, D. et al., "Crystal structure of an antibody bound to an immunodominant peptide epitope: Novel features in peptide-antibody recognition," <i>J. Immunol.</i> 165(12):6949-55 (2000).	<input type="checkbox"/>
	71	NAIR, S. et al., "Antigen-presenting cells pulsed with unfractionated tumor-derived peptides are potent tumor vaccines," <i>Eur. J. Immunol.</i> 27:589-97 (1997).	<input type="checkbox"/>
	72	NAIR, S. et al., "Induction of cytotoxic t cell responses and tumor immunity against unrelated tumors using telomerase reverse transcriptase RNA transfected dendritic cells," <i>Nature Med.</i> 6(8):1011-7 (2000).	<input type="checkbox"/>
	73	NGO et al., <i>The Protein Folding Problem and Tertiary Structure Predictor</i> , Mertz et al., Eds., pp. 433, 492-5 (1994).	<input type="checkbox"/>
	74	O'HARE, M. et al., "Conditional immortalization of freshly isolated human mammary fibroblasts and endothelial cells," <i>Proc. Natl. Acad. Sci.</i> 98(2):646-651 (2001).	<input type="checkbox"/>
	75	OHYASHIKI, J. et al., "Quantitative relationship between functionally active telomerase and major telomerase components (hTERT and hTR) in acute leukaemia cells," <i>Brit. J. Cancer</i> 92:1942-7 (2005)	<input type="checkbox"/>

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	7	of	8	Attorney Docket Number	015389-002611US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	76	PARKER, K. et al., "Scheme for ranking potential HLA-A2 binding peptides based on independent binding of individual peptide side-chains," <i>J. Immunol.</i> 152(1):163-75 (1994). 1 page Abstract only	<input type="checkbox"/>	
	77	PING, L. et al., "Dramatic increase of telomerase activity during dendritic cell differentiation and maturation," <i>J. Leukoc. Biol.</i> 74:270-6 (2003).	<input type="checkbox"/>	
	78	<i>Protein Nucleic Acid and Enzyme</i> 42(9):1407-19 (July 1997). Japanese Language document		
	79	ROITT, I. et al., <i>Immunology</i> , 4 th Edition, Mosby, London, pp. 7.7-7.8 (1996).	<input type="checkbox"/>	
	80	SAMBROOK, J. et al., Chapter 17, "Expression of Cloned Genes in Escherichia coli," <i>Molecular Cloning, A Laboratory Manual</i> , Cold Spring Harbor Press, Plainview NY (1989).	<input type="checkbox"/>	
	81	SKOLNICK, J. & FETROW, J., "From genes to protein structure and function: Novel applications of computational approaches in the genomic area," <i>Tibtech</i> 18:34-9 (2000).	<input type="checkbox"/>	
	82	Stratagene Catalog, p. 39 (1988).	<input type="checkbox"/>	
	83	SU, Z. et al., "Immunological and clinical responses in metastatic renal cancer patients vaccinated with tumor RNA-transfected dendritic cells," <i>Cancer Res.</i> 63:2127-33 (2003).	<input type="checkbox"/>	
	84	The Adjustment Foundation of Science and Technology Promotion News, Vol. 160 (1997-Jul-11) p. 0-6.		
	85	Tissue Culture, vol. 23[1] (1997-Jan) p.4-11 Japanese language document		

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/432,503
				Filing Date	November 2, 1999
				First Named Inventor	Cech, Thomas R.
				Art Unit	1635
				Examiner Name	Jon E. Angell
Sheet	8	of	8	Attorney Docket Number	015389-002611US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	86	VONDERHEIDE, R. et al., "Vaccination of cancer patients against telomerase induces functional antitumor CD8+ T lymphocytes," <i>Clin. Cancer Res.</i> 10:828-39 (2004).	<input type="checkbox"/>
	87	YI, X. et al., "Quantitation of telomerase components and hTERT mRNA splicing patterns in immortal human cells," <i>Nucl. Acids Res.</i> 23:4818-25 (2001).	
	88	YOSHIMI OKADA & JOUE IKEDA (Eds.), Japanese Molecular Biology Association edition, <i>Development of Molecular Biology</i> 13, "Expression of information and control in higher plant," Feb 10, 1990, Maruzen Corp. pp. 262-263.	

Examiner Signature	/Jon Eric Angell/	Date Considered	03/26/2009
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.